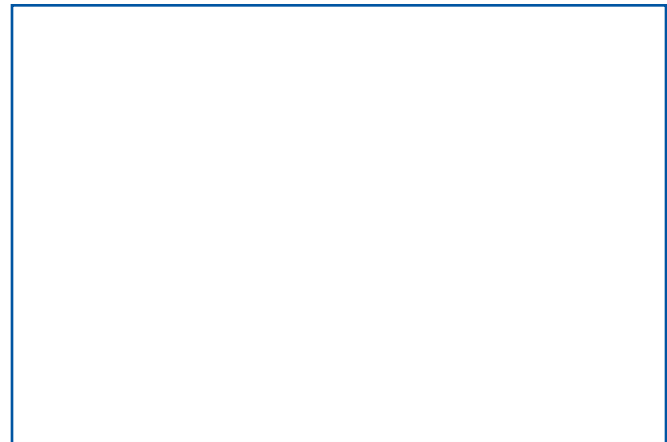
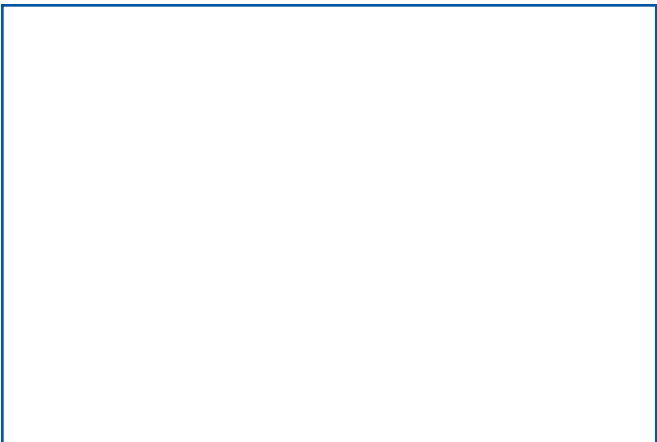


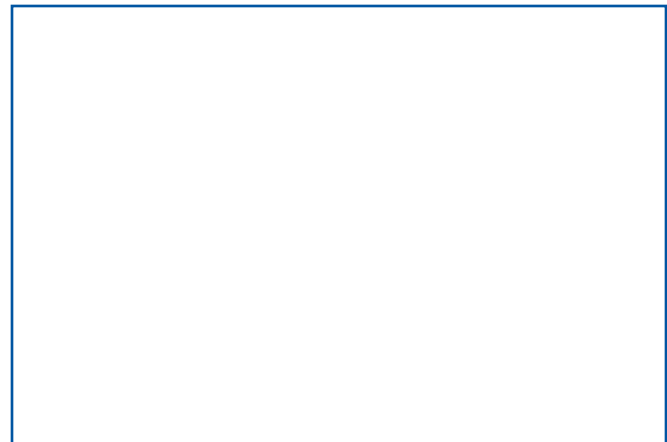
Potential Places of Refuge for Cook Inlet Subarea



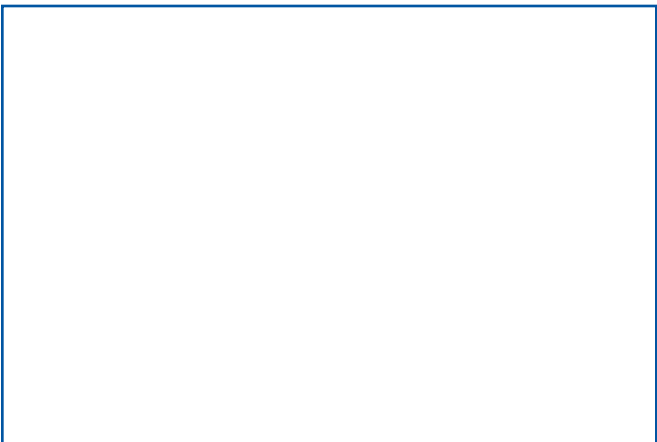
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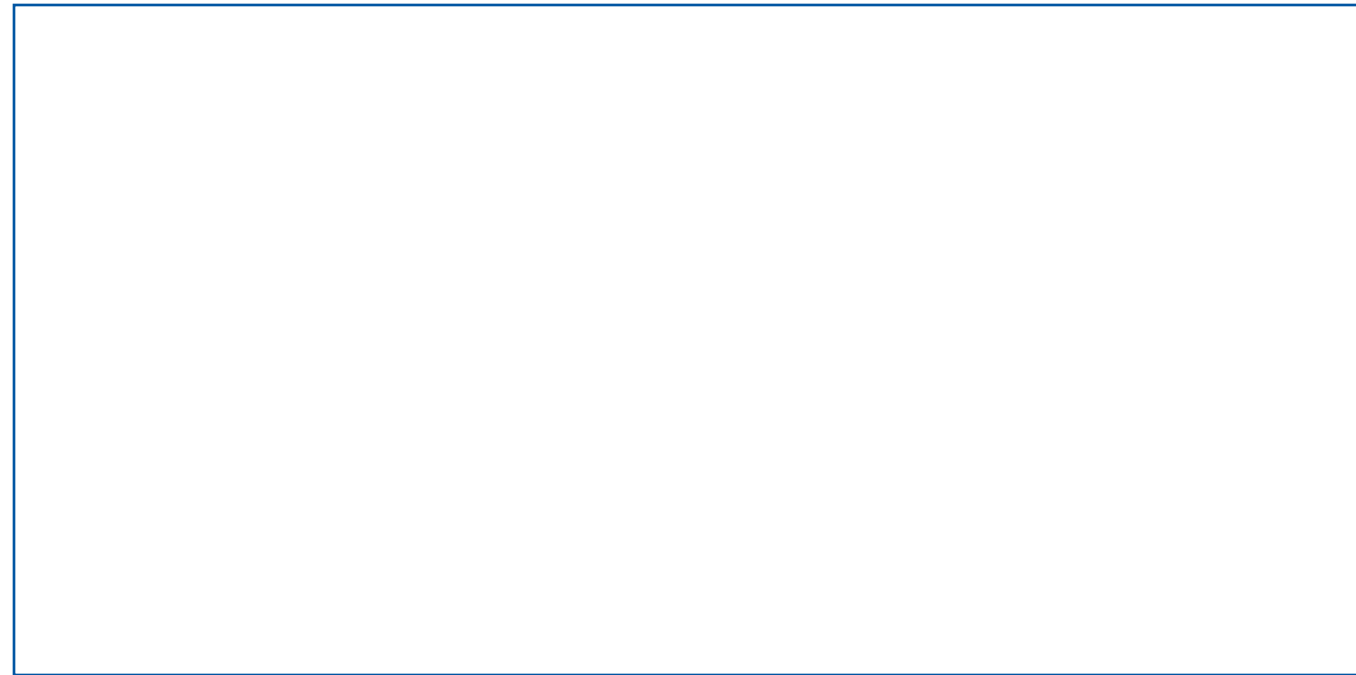
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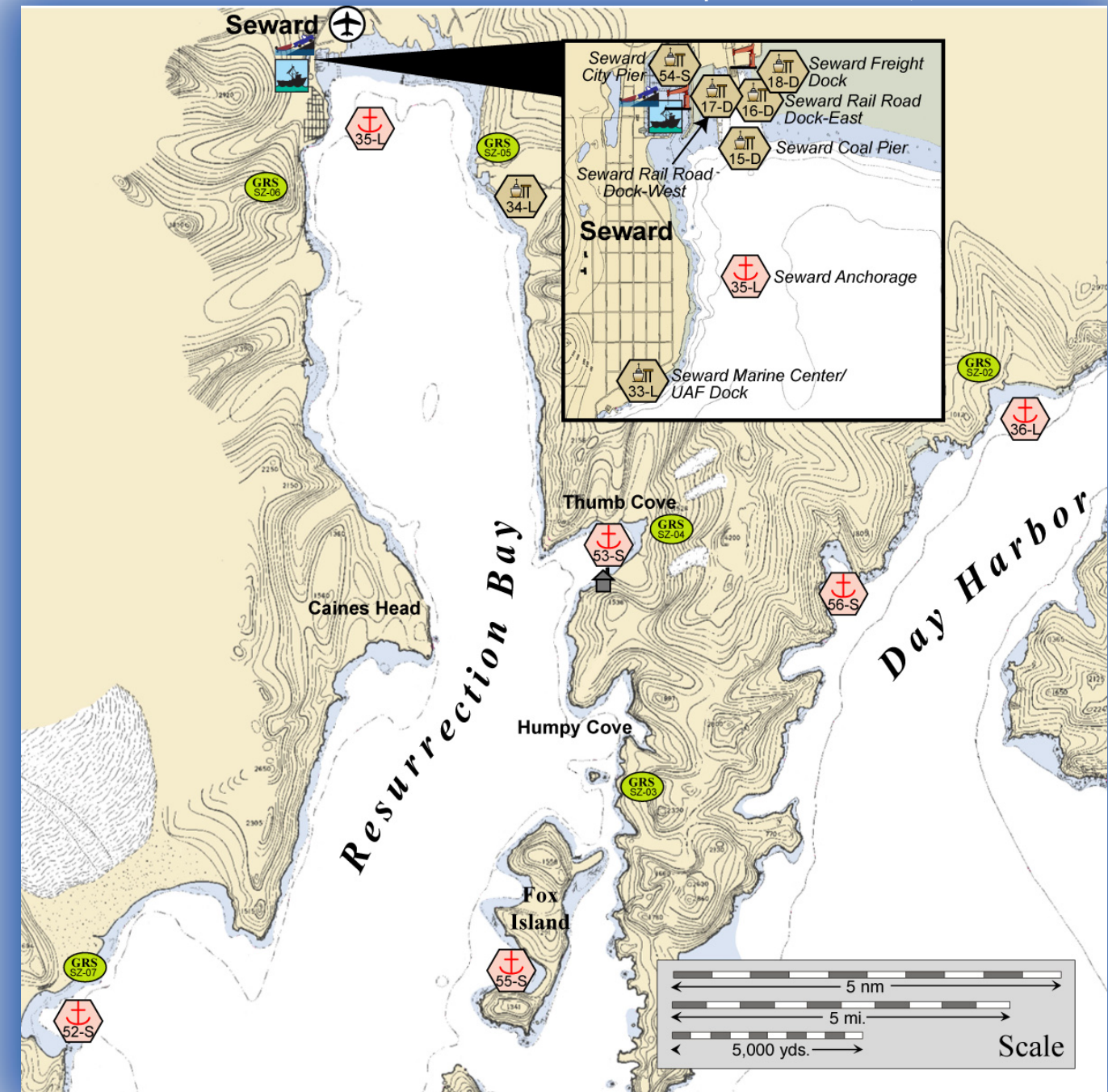
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	Anchorage		Fish Hatchery
	Mooring		Private Cabins
	Dock/pier		Public Use Cabins
	Crane		Boat Harbor
	Airport		Boat Ramp
	Existing GRS		

Cook Inlet  
PPOR  
Map 06

COOK INLET PPOR-06 Seward Area – Physical and Operational Characteristics													
	Seward Coal Pier	Seward Rail Road Dock-East	Seward Rail Road Dock-West	Freight Dock	Seward Marine Center/UAF Dock	Seward Ship's Drydock	Seward Anchorage	Day Harbor	Bulldog Cove	Thumb Cove	Seward City Pier	Sunny Cove	Talus Bay
ID Number	15-D	16-D	17-D	18-D	33-L	34-L	35-L	36-L	52-S	53-S	54-S	55-S	56-S
Location	60°06.94N 149°25.74W	60°07.09N 149°25.60W	60°07.07N 149°25.70W	60°07.13N 149°25.51W	60°05.94N 149°26.34W	60°05.45N 149°21.72W	60°06.38N 149°25.74W	60°02.10N 149°06.89W	59°53.83N 149°33.48W	60°00.38N 149°18.00W	60°07.18N 149°26.07W	59°54.65N 149°20.65W	59°59.92N 149°11.93W
Maximum Vessel Size	Deep draft, greater than 20,000 Gross Tons				Light draft, up to 20,000 Gross Tons				Shallow draft, 300 Gross Tons and less				
Type of Berthing	Dock						Anchorage				Dock	Anchorage	
Contact	Harbor Master 907.224.3138	907.265.2504-Operations Manager			Port Engineer 907.224.4318	907.224.3198-Manager	Harbor Master 907.224.3138	NA			Harbor Master 907.224.3138	NA	
Navigational Approach	Approach from S					Approach from the S,E	Approach from S	Approach from the S,SW	Approach from the S,SE	Approach from NW,W,S	Approach through harbor	Approach from the W	Approach from S
Minimum Water Depths	50 ft. at dock face	35 ft. at dock face			33 ft. at dock face	18 ft. at dock face	90 ft. in the swing area	80 ft. in the swing area	42 ft. in the swing area	60 ft.in the swing area	12 ft. at dock face	110 ft. in the swing area	80 ft. in the swing area
Maximum Water Depth	50 ft. at dock face	35 ft. at dock face			33 ft. at dock face	18 ft. at dock face	200 ft. in the swing area	540 ft. in the swing area	54 ft. in the swing area	190 ft. in the swing area	12 ft. at dock face	160 ft. in the swing area	175 ft. in the swing area
Maximum Vessel Draft	35 ft.					20 ft.	35 ft.	18 ft.	10 ft.	10 ft.	10 ft.	20 ft.	20 ft.
Swing Room/Dock Face	300 ft. (1310 w/ dolphins)	100 ft. (1050 w/ dolphins)	210 ft (1135 w/ dolphins)	400 ft.	190 ft.	306 ft.	1200 ft.	2700 ft.	1200 ft.	600 ft.	1000 ft.	1200 ft.	1500 ft.
Bottom Type	NA						Mud			Silt	NA	Mud	Sand
Docks/Piers	Nearest Alt. Dock PPOR-06-17-D Seward Rail Road Dock-West		Nearest Alt. Dock PPOR-06-16-D Seward Rail Road Dock-East		Nearest Alt. Dock PPOR-06-34-L Seward Ship's Drydock	Nearest Alt. Dock PPOR-06-33-L Marine Center Dock							
Moorings	Nearest Mooring PWS PPOR-11-M39 Outside Bay												
Anchorage	Nearest Anchorage PPOR-06-34-L Seward Anchorage (Temporary for Deep Draft vessels)						Nearest Anchorage PPOR-06-36-L Day Harbor	Nearest Anchorage PPOR-06-35-L Seward Anchorage	Nearest Anchorage PPOR-06-53-S Thumb Cove	Nearest Anchorage PPOR-06-52-S Bulldog Cove	Nearest Anchorage PPOR-06-35-L Seward Anchorage	Nearest Anchorage PPOR-06-52-S Bulldog Cove	
Prevailing Winds	Northerly in the winter, Southerly in the summer												
Currents	Currents are tidally influenced. The Alaska Coastal Current runs west along shore at 1-1.5 knot												
Tides	Mean High Water- 9.7 (Higher- 10.6) , Mean Low Water- 1.4 (Lower- -4.0)							Mean High Water- 9.6(Higher- 10.5) , Mean Low Water- 1.4 (Lower- -4.0)					Mean High Water- 9.6(Higher- 10.5) , Mean Low Water- 1.4 (Lower- -4.0)
Sea Conditions	Exposed to southern swell					Protected	Exposed anchorage	Exposed to southern swell	Exposed to S-E swell	Exposed to W swell	Protected	Exposed to W swell	Exposed to E swell
Shelter from Severe Storms	Sheltered from E-W storms					Protected	Minimal protection	Sheltered from E-W storms	Sheltered from W-N storms	Sheltered from N--S storms	Protected	Sheltered from N-S storms	Sheltered from S-N storms
Fog	Fog can occur during all seasons.												
Sea ice	Ice conditions can occur in protected waters November-March												

Site ID Number and Vessel Size Classification		COOK INLET PPOR-06 Seward Area –Site Considerations														
D = Deep Draft Vessel, greater than 20,000 GT			Seward Coal Pier	Seward Rail Road Dock-East	Seward Rail Road Dock-West	Freight Dock	Seward Marine Center/UAF Dock	Seward Ship's Drydock	Seward Anchorage	Day Harbor	Bulldog Cove	Thumb Cove	Seward City Pier	Sunny Cove	Talus Bay	
L = Light Draft Vessel, up to 20,000 GT			15-D	16-D	17-D	18-D	33-L	34-L	35-L	36-L	52-S	53-S	54-S	55-S	56-S	
S = Shallow Draft Vessel, 300 GT and less																
		Human Health & Safety														
		Communities – distances-nm	Seward- 0.0						Seward-2.2	Seward- 0.5	Seward- 29	Seward- 16	Seward-8	Seward- 0.0	Seward- 13	Seward-24.5
		Natural Resource Considerations														
		Fish & Wildlife	Spawning salmon and herring, sea otters, seals, seabird & eagle nesting, waterfowl concentration													
		Threatened & Endangered Species	Steller Sea Lions forage in the area													
		Sensitive Areas	Not Designated					Marine Life Center and Shellfish Culturing Plant raw water intakes in the area	Spring Creek nearby	Not Designated	Designated as a Environmentally Sensitive Areas	Designated as a Environmentally Sensitive Areas with in KFNP	Designated as a Environmentally Sensitive Areas	Not Designated	Not Designated	Designated as a Environmentally Sensitive Areas
		Other Stakeholder Considerations														
		Fisheries	Salmon, groundfish													
		Historic Properties	Historic Properties are present throughout this area													
		Mariculture	Shellfish Culturing Plant										Mariculture site located in Thumb Cove	Shellfish Culturing Plant		
Subsistence	None					Salmon			Salmon, Seals			None	Salmon, Seals			
Tourism/Recreation	High recreational use area- sport fishing, kayaking, anchorage, excursion boats, wildlife viewing															
Waterfront Public Facilities/Parks	Seward Small Boat Harbor, Alaska State Park and Kenai Fjords National Park facilities nearby.						None	Seward Small Boat Harbor, Alaska State Park and Kenai Fjords National facilities nearby	Alaska State Marine Park	Kenai Fjords National Park	Alaska State Parks 2 public use cabins are in Thumb Cove	Seward Small Boat Harbor, Alaska State Park and Kenai Fjords National facilities nearby	Alaska State Marine Park	None		
Waterfront Private Facilities	Numerous marine trade businesses in Seward; Cannery Facilities, 50 & 250 ton Travelifts, 5000 ton Synchro Lift								None		Private homes and piers	Cannery Facilities, 50 & 250 ton Travelifts	None			
Response and Salvage Resource Considerations																
Ability to Boom Vessel	Weather dependent							Yes	Weather dependent				Yes	Weather dependent		
Geographic Response Strategies	SZ-05,06								SZ-03,04		SZ-07	SZ-02	SZ-05,06	None	SZ-02	
Closest Alternative Places of Refuge (same sized vessel)	PPOR 06-17-D Seward Railroad Dock-west: 0.2 nm.	PPOR 06-17-D Seward Railroad Dock-west: 0.1 nm.	PPOR 06-16-D Seward Railroad Dock-east: 0.1 nm.	PPOR 06-17-D Seward Railroad Dock-west: 0.1 nm.	PPOR 06-35-L Seward Anchorage: 0.75 nm.	PPOR 06-35-L Seward Anchorage: 0.75 nm.	PPOR 06-33-L Seward Marine Center: 0.75 nm.	PPOR 06-35-L Seward Anchorage: 27 nm.	PPOR 06-55-S Sunny Cove: 6 nm.	PPOR 06-55-S Sunny Cove: 6 nm.	PPOR 06-53-S Thumb Cove: 9 nm.	PPOR 06-52-S Bulldog Cove: 6 nm.	PPOR 06-53-S Thumb Cove: 16 nm.			

COOK INLET PPOR-06 Seward Area Stakeholders	
Landowner (yr-2007)	Contact
Alaska State Parks	Kenai District Ranger
Alaska National Maritime Wildlife Refuge	Dept. of the Interior-Regional Environmental Officer
Alaska Dept of Fish and Game	Regional Supervisor
Alaska Department of Natural Resources	Natural Resource Manager
Kenai Fjords National Park	Dept. of the Interior-Regional Environmental Officer
English Bay Corporation	CEO
Port Graham Corporation	President
Native Allotments	Dept. of the Interior-Regional Environmental Officer
Bureau of Land Management	Dept. of the Interior-Regional Environmental Officer
Private Landowners-contact Alaska State Lands Recorder Office	Seward District Recorder

NOTE: Sensitive resource information can be found on other maps which can be accessed through the sensitive area section of the Cook Inlet Sub-Area Contingency Plan: <http://www.akrrt.org/cookinletplan/cookinletplantoc.shtml>